

COLOR ISOLATED BACKLIGHT FOR LCD

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5 ABSTRACT OF THE DISCLOSURE

10 A color, transmissive LCD is described herein which uses red, green, and blue LEDs as the light source. The R, G, and B LEDs are coupled to separate light guides, one light guide for each color. These light guides may take the form of three overlying plastic or glass sheets. In another embodiment, thin fiber optic cables arranged parallel to each other on a supporting surface are used as the light guides, and each fiber optic cable is optically coupled to only one R, G, or B LED in a repeating pattern. The light guides contain deformities to emit light coinciding with the positions of the red, green, and blue pixels. The R, G, and B LEDs are constantly on, and there is no color filtering.